

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended) A semiconductor device including a capacitor, comprising:

a lower electrode of said capacitor which has an upper surface and a side surface and has an opening on said upper surface;

~~an electric conductor or an insulator~~ a film provided to cover and plug at least in the ~~vicinity of an entry in~~ of said opening and containing a ~~material~~ chemical element of said lower electrode as a part of a composition;

a dielectric film of said capacitor which is provided to face said upper surface and said side surface of said lower electrode, the dielectric film not falling into said opening; and

an upper electrode of said capacitor which is provided to face said lower electrode through said dielectric film.

Claim 2 (Currently Amended) The semiconductor device according to claim 1, wherein said ~~electric conductor or said insulator~~ film is also provided on said upper surface of said lower electrode successively from an inside of said opening.

Claim 3 (Canceled)

Claim 4 (Withdrawn) A semiconductor device including a capacitor, comprising:

a lower electrode of said capacitor which has an opening;

an insulator provided in a bottom portion of said opening without completely filling in said opening;

a dielectric film of said capacitor which is provided on said insulator and said lower

electrode without completely filling in said opening; and

an upper electrode of said capacitor which is provided on said dielectric film.

Claim 5 (Withdrawn) The semiconductor device according to claim 4, wherein said lower electrode has a roughened inner surface in said opening and/or has such a shape that said opening is gradually narrowed from an entry toward said bottom portion.

Claim 6 (Withdrawn) A semiconductor device including a plug, comprising:
an interlayer film having a hole;
a plug body provided in said hole with an opening in an entry of said hole; and
an electric conductor provided on an inside and outside of said hole to close said opening of said plug body and provided so as not to come in contact with said interlayer film, and containing a material of said plug body as a part of a composition,
said plug including said plug body and said electric conductor.

Claim 7 (Withdrawn) A method of manufacturing a semiconductor device, comprising the steps of:

- (a) forming an interlayer film and opening said interlayer film to form a hole;
- (b) forming a conductive film on said interlayer film to provide said conductive film in said hole;
- (c) removing a portion of said conductive film which is provided on an outside of said hole, thereby exposing said interlayer film; and
- (d) oxidizing, siliciding or nitriding an exposed surface of said conductive film, thereby forming an oxide film, a silicide film or a nitride film.

Claim 8 (Withdrawn) The method of manufacturing a semiconductor device according to claim 7, wherein said step (d) includes the step of forming said oxide film or said nitride film by plasma oxidation or plasma nitriding.

Claim 9 (Withdrawn) The method of manufacturing a semiconductor device according to claim 7, wherein said semiconductor device comprises a capacitor including, as a lower electrode, a portion of said conductive film which is provided in said hole,

said manufacturing method further comprising the steps of:

(e) removing said interlayer film after said step (c) to expose a side surface of said lower electrode;

(f) forming a dielectric film of said capacitor to face an upper surface and said side surface of said lower electrode after said steps (d) and (e); and

(g) forming an upper electrode of said capacitor to face said lower electrode through said dielectric film.

Claim 10 (Withdrawn) The method of manufacturing a semiconductor device according to claim 9, wherein said step (e) is executed before said step (d).

Claim 11 (Withdrawn) The method of manufacturing a semiconductor device according to claim 9, wherein said step (e) includes the step of removing said interlayer film to leave a part of said interlayer film.

Claim 12 (Withdrawn) The method of manufacturing a semiconductor device according to claim 7, further comprising the step of:

(h) removing a portion of said oxide film, said silicide film or said nitride film which is

provided on an outside of said hole.

Claim 13 (Withdrawn) A method of manufacturing a semiconductor device including a capacitor, comprising the steps of:

- (i) forming an interlayer film and opening said interlayer film to form a hole;
- (j) forming a conductive film along an exposed surface in said hole;
- (k) forming an insulator on said conductive film to fill in said hole;
- (l) removing a portion of said conductive film which is provided on an outside of said hole to expose said interlayer film, thereby forming a lower electrode of said capacitor by said conductive film;
- (m) removing said insulator to leave a part of said insulator in a bottom portion of an opening of said lower electrode corresponding to said hole;
- (n) removing said interlayer film to expose said lower electrode;
- (o) forming a dielectric film of said capacitor on said insulator and said lower electrode without completely filling in said opening after said steps (m) and (n); and
- (p) forming an upper electrode of said capacitor on said dielectric film.

Claim 14 (Withdrawn) The method of manufacturing a semiconductor device according to claim 13, wherein said step (n) includes the step of removing said interlayer film to leave a part of said interlayer film.